



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,525

08/24/2006

Nick Gruber

294822US0PCT

7375

22850

7590

03/13/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

LEONARD, MICHAEL L

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

03/13/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/590,525	Applicant(s) GRUBER ET AL.	
	Examiner MICHAEL LEONARD	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-19 are rejected under 35 U.S.C. 102 (b) as being anticipated by U.S. Patent No. 5,500,253 to *Sanduja et al.*

As to claims 11 and 15, Sanduja discloses a coating composition comprising a polymer containing isocyanate functionality, a polyethylenically unsaturated monomer, such as hydroxyethyl methacrylate (Column 3, line 13) or pentaerythritol tri(meth)acrylate (Column 3, line 46) and a source of cations selected from the group that includes Ce^{4+} (Column 2, lines 32-41).

As to claims 12-14, Sanduja discloses Ce^{4+} sulfates or Ce^{3+} sulfates as suitable graft polymerization initiators (Column 4, lines 7-8).

As to claims 16 and 17, Sanduja discloses diisocyanates such as hexamethylene diisocyanate and 1,3-cyclopentylene diisocyanate (Column 4, line 45).

As to claims 18 and 19, Sanduja discloses a method of applying the composition to a substrate and suitable coated substrates (Column 7, line 39 and 50).

Claims 11-12 and 15-20 are rejected under 35 U.S.C. 102 (e) as being anticipated by U.S. Patent Pub. No. 2003/0065050 to *Yamaguchi et al.*

Art Unit: 1796

As to claims 11-12 and 15-17, Yamaguchi discloses a resin composition comprising particles prepared by bonding at least one oxide of an elements selected from a group that includes cerium (Abstract, Paragraph 0015), a compound having at least two polymerizable unsaturated groups such as the ones disclosed in Paragraph 0048, and an isocyanate compound, such as the ones disclosed in paragraph 0046. Yamaguchi further discloses the use of photoinitiators (Paragraph 0076), solvents to adjust the coating film thickness (Paragraph 0098) and various other additives (Paragraph 0092 and 0093).

As to claims 18-19, Yamaguchi discloses a method of applying the composition onto a plastic substrate and curing the coating.

As to claim 20, Yamaguchi discloses curing methods wherein radioactive rays are used either individually or in combinations of two or more and that the rays can be used simultaneously or with certain intervals (Paragraph 0102).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 20 is rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 5,500,253 to *Sanduja et al.* in view of U.S. Patent Pub. No. 2003/0065050 to *Yamaguchi et al.*

Art Unit: 1796

Sanduja as discussed above is applied here as such. Sanduja fails to disclose the dual-cure method using cerium (IV) compound.

Yamaguchi discloses curing methods wherein radioactive rays are used either individually or in combinations of two or more and that the rays can be used simultaneously or with certain intervals (Paragraph 0102). Yamaguchi further discloses applying the composition onto an object, drying the coating by removing volatile components at a temperature from 0 to 200° and then curing the coating by heat and/or radioactive rays.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the method disclosed by Yamaguchi to cure the composition disclosed by Sanduja in order to create cured products that possess excellent hardness, superior scratch resistance, low curling properties, and superb adhesion, in order to prevent stains or scratches on plastic optical articles (Paragraph 0105).

EP-402932 fails to disclose the isocyanate-functional compound B or D and therefore is not an anticipatory reference.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LEONARD whose telephone number is (571)270-7450. The examiner can normally be reached on Mon-Fri 8:00-5:00.

Art Unit: 1796

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL LEONARD/
Examiner, Art Unit 1796

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796